03-15-04

Proposed Amendments to the Claims for discussion with examiner Andrew Graham

(Currently Amended) A method for converting an input signal to one of a 1. plurality of differing output sample rates, the method comprising:

receiving, at an input sample rate, a plurality of data points, associated with the input signal;

operating on said plurality of data points to associate said input signal with a predetermined set of parameters, with said set of parameters including a first transition band having an image corresponding thereto; and

dynamically varying said input sample rate associated with said input signal to any one of the plurality of differing output sample rates by interpolation with an interpolator having associated therewith a second transition band, with the width associated with said second transition band being a function of a spectral separation of said first transition band and said image, and wherein a second an output signal is produced having a sequence of data samples approximating the input signal, and said output sample rate is capable of being varied to any one of said plurality of differing sample rates for any output data sample.

(Currently Amended) A method for converting a digital audio signal to a different 12. sample rate, the method comprising:

receiving a plurality of data points, associated with an audio signal, at an initial sample rate;

halfband filtering said plurality of data points with a halfband filter to provide intermediate data points; and

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interpolating the intermediate data points with an interpolator having independently programmable parameters, and wherein the different sample rate is provided by interpolating at least a subset of the intermediate data points based on the independently programmable parameters, and wherein said different sample rate is capable of being varied at any output data sample.

(Currently Amended) A computer program product for converting an input signal 17. to one of a plurality of differing output sample rates, the method comprising:

code for receiving a plurality of data points, associated with the input signal, at an input sample rate;

code for operating on said plurality of data points to associate said input signal with a predetermined set of parameters, with said set of parameters including a first transition band having a first width;

code for dynamically varying said input sample rate associated with said signal to any one of the plurality of differing output sample rates by interpolating a subset of data points of said plurality of data points with an interpolator having associated therewith a second transition band, with the width associated with said second transition band being a function of a spectral separation of said first transition band and said image, and wherein a second an output signal is produced having a sequence of data samples approximating the input signal and said output sample rate is capable of being varied to any one of said plurality of differing sample rates for any output data sample.; and

a computer-readable storage medium for storing code.

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23. (Currently Amended) A computer program product for converting a digital audio signal to a different sample rate, the product comprising:

a computer-readable storage medium for storing code, said code including code for receiving a plurality of data points, associated with an audio signal, at an initial sample rate;

code for halfband filtering said plurality of data points with a halfband filter to provide intermediate data points; and

code for interpolating the intermediate data points with an interpolator having independently programmable parameters, and wherein the different sample rate is provided by interpolating at least a subset of the intermediate data points based on the independently programmable parameters, and wherein said different sample rate is capable of being varied at any output data sample.